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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,186	10/09/2001	Gregory Jantsch	13543-003001	4489
26161	7590	06/06/2005	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			KIM, AHSHIK	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/973,186	<b>Applicant(s)</b> JANTSCH, GREGORY	
	<b>Examiner</b> Ahshik Kim	<b>Art Unit</b> 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/10/05 (Amendment).
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/30/04 3/14/05</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Amendment*

1. Receipt is acknowledged of the amendment filed on March 10, 2005. In the amendment  
5 claims 1, 2, 6, 7, 8, 17, 18 were amended. Currently, claims 1-38 remain for examination.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

10 A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 15 3. Claims 1-21, 23, 24, 26-31, and 33-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Graef et al. (US 4,664,369, hereinafter “Graef”).

Re claims 1-4, 8-12, 17, 18, 20, 21, 23, 24, 30, 31, and 33-38, Graef teaches a thickness indicator apparatus used in Automated Teller Machine (ATM) (see abstract; col. 2, lines 27+) for detecting double bills when the bills are retrieved from the stack (col. 1, lines 34+; col. 3, lines 58+; col. 6, lines 4+). . The thickness detector is comprised of two elongated fingers 50 (or free ends) attached to a wishbone 45 (col. 4, lines 16+; see figure 3). When bills move between the plate 42 and the elongated fingers 50, the elongated fingers are displaced/pushed by the thickness of the bill (col. 4, line 51 – col. 5, line 37). Re claim 5, the bill moving path further comprised of a roller 12 and a counter rotating roller 36 (col. 3, lines 36+; col. 3, lines 60+).

Art Unit: 2876

Re claim 6, the thickness of the bill causes wishbone 45 to rotate about the pin 58 in counter clockwise direction (col. 5, lines 9+). Accordingly, the pin is considered a rotational axis.

Re claims 7, 13, 15, and 16, as bills pass between the plate 40 and elongated finger, the target 52 rotates toward the proximity sensor 66 (col. 4, lines 39+), and the sensor generates a voltage signal proportional to the distance between the sensor 66 and the target 52 in inductive manner.

Re claim 14, as shown in figure 1, the elongated finger 50 is connected to a spring-loaded locking means 64 (col. 4, lines 28-38).

Re claims 19 and 26-29, as shown in figure 3, the apparatus is comprised of a housing/frame 15 which houses a bill thickness detecting component (see figure 3; col. 3, lines 36+).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 22, 25, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graef et al. (US 4,664,369).

Although Graef does not explicitly suggests the details of the housing as they are recited in the above-mentioned claims (snap-in bearings and grounding elements comprising braided

Art Unit: 2876

wire and metal lugs), it is the Examiner's view that Graef shows a box-type of housing which is substantially the same housing Applicant claims. Perhaps the component parts for building such housing may be different, but it is the Examiner's view that more substantial elements – thickness (or double bills) detection utilizing elongated fingers are disclosed by Graef. The differences in constructing housing may not patentable unless Applicant particularly points out patentabilities of the housing.

### ***Response to Arguments***

6. Applicant's amended claims and arguments filed on March 10, 2005 have been carefully considered, but they are not persuasive. It is the Examiner's view that the Graef patent still discloses the subject matter recited in the amended claims.

Applicant amended claim 1 such that the claim 1 now recites "A method comprising withdrawing currency from a stack of bills for dispensing to a customer, ..... by which the free end is moved by measuring relative rotation of the two inductively coupled elements." In doing so, Applicant argues that the amended claim overcame the rejection made with Graef patent. Examiner respectfully disagrees. As shown in Graef (figures 1 and 2), the wishbone-looking member 48 with two fingers 50 are displaced when the currency goes between the frame and the bottom parts 50 of the two finger 46. As further disclosed in figures 6-11, the target member is displaced toward the sensor 66. The wishbone member is mounted to the frame 15 by pin 58 which goes through the counter sunk hole 54. From the horizontal perspective (see figure 1; the line going through the spring 64 and pin 58), the target 52 rotates toward to or away from the sensor 62. The sensor 66 and target 52 work in inductive manner.

The amended claims and remarks describing these elements have been fully considered, but they are not persuasive, and therefore, the Examiner has made this Office Action final.

***Conclusion***

5       **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after  
10 the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15 I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Lee (US 5,971,392); Fujii et al. (US 4,729,556); Cannaverde et al. (US 5,203,555) discloses sheet processing apparatus. Applicant is respectfully suggested to review the cited prior arts.

20 II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahshik Kim whose telephone number is (571)272-2393. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday. The fax number directly to the Examiner is (571)273-2393.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571)272-2398. The fax phone number for this  
25 Group is (703)872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

Art Unit: 2876

*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Ahshik Kim  
Patent Examiner  
Art Unit 2876  
May 27, 2005